

NETWORK ENGINEER

GRADE: 23

FLSA: EXEMPT

CHARACTERISTICS OF CLASS:

The Network Engineer performs intermediate to difficult technical and intermediate administrative work involved in the installation, configuration, maintenance of the City's Local Area Network and Institutional Network (I-Net). The Network Engineer also manages the City's two data centers. The work requires a reactive and approach when providing user assistance and network maintenance. There are moderate physical demands, occasionally working in difficult-work positions, and the work involves considerable mental, effort and stress. The work is subject to functional policies and goals under general direction from the Director of Information and Technology and has serious consequences for network users City-wide.

EXPECTATIONS OF ALL CITY EMPLOYEES:

- Learn and demonstrate an understanding of City, department, division and team goals.
- Serve and meet the needs of customers during routine or emergency situations.
- Ability and willingness to work as part of a team, to demonstrate team skills and to perform a fair share of team responsibilities.
- Ability to assess his/her work performance or the work performance of the team.
- Plan and organize his/her work, time and resources, and if applicable that of subordinates.
- Contribute to the development of others and/or the working unit or overall organization.
- Produce desired work outcomes including quality, quantity and timeliness.
- Communicate effectively with peers, supervisors, subordinates and people to whom service is provided.
- Understand and value differences in employees and value input from others.
- Consistently report to work and work assignments prepared and on schedule.
- Consistently display a positive behavior with regard to work, willingly accept constructive criticism and be respectful of others.

EXAMPLES OF DUTIES:

- Installs network hardware such as file servers, switches, routers, hubs, workstations, and other network nodes.
- Helps manage the City's data centers including racking of servers, electrical/UPS needs, and climate control
- Monitors, diagnoses, and troubleshoots the network
- Installs and upgrades the Network Operating System, generates and installs workstation shell utilities on each workstation, and tests connectivity to the file server. Installs network applications on workstations and/or file servers,

configures workstations and servers to ensure connectivity and maximum performance.

- Provides assistance to network users in accessing network hardware and applications. Trains users on how to access the network and network printers. Assists users in solving printing problems.
- Creates and maintains user profiles, including menus, login scripts, drive mappings, and directories.
- Works with security and applications administrator to implement network security related hardware and software.
- Installs patches and enhancements under the direction of the senior network engineer
- Installs and sets up network printers, print servers, and related printing software on the network.
- Monitors the procedures to run daily, weekly, and monthly backups.
- Monitors network resources utilization, disk storage, and memory usage on daily basis.
- Determines disk space for each user. Also monitors network for any viruses.
- Assists with planning and implementing network expansion.
- Keeps abreast of developments in the Server/Networking field, advises Information and Technology staff and other City personnel on the most cost-effective hardware/software configurations to satisfy needs.
- For hardware problems that cannot be resolved in-house, coordinates service that must be conducted by the appropriate third party vendor. Maintains troubleshooting log and documents solutions.
- Organizes, develops, and prepares training materials for personal computer applications.
- Schedules and conducts hands-on-training sessions.
- Assists in selecting and evaluating software products. Also assists departments with planning, selecting, and installing of PC equipment, related peripherals and accessories.
- Performs other duties as required.

QUALIFICATIONS:

Required Training and Experience:

Graduation from an accredited college or university with major course work in Computer Science, Information Systems or related field plus two or more years experience with Cisco switches and routers, Microsoft Active Directory, and network monitoring and test equipment. Experience managing a data center environment also a plus. Must have driver's license valid in the State of Maryland. Must possess or have the ability to obtain a Microsoft Systems Engineer Certification (MCSE) and/or Cisco Certified Network Administrator/Professional (CCNA/CCNP) within a reasonable amount of time as determined by the city.

Preferred Knowledge, Skills and Abilities:

- Knowledge of PC assembly.
- Knowledge of PC systems, their components, and common software packages.
- Ability to install, configure and maintain Microsoft Active Directory.
- Ability to analyze and resolve network performance problems.
- Ability to work independently, plan and logically organize the work.
- Ability to follow and understand new developments in the network and PC field.
- Ability to explain concepts clearly in writing and orally.

NOTE: (Employees who meet experience, education and performance requirements, as determined by the City, of those necessary for the Senior Network Engineer, may be promoted non-competitively to the Senior Network Engineer job class.)